

CREATING THUMBNAIL GALLERIES

Automating Tasks with Photoshop

In this chapter, you will:

- ◆ Use actions
- ◆ Process tasks in batches
- ◆ Save and share actions
- ◆ Create thumbnail galleries
- ◆ Use the other automate commands

Web sites often contain online image galleries, such as those that have examples of the designer's work, or photographs of the products sold through the site. The galleries usually use several small images that link to larger versions of the images. These small images are called **thumbnails**. When creating galleries of thumbnail images, a graphic designer is faced with the task of manipulating dozens, or perhaps hundreds of images.

Many image-editing tools let you create scripts that automate image editing, allowing the computer to make the necessary changes to your images. You can save these scripts and use them later for other images. Even if you are not creating a gallery, you will find it easier to eliminate repetitive tasks by combining them into single commands.

This chapter explains how to create Web galleries, and how to process multiple images at the same time.

USING ACTIONS

In Photoshop or ImageReady, an **action** is a sequence of commands, similar to a macro in other applications. An action can contain commands from almost any feature of Photoshop, including resizing, running filters, or making other edits. Consider an action as a kind of script that instructs Photoshop or ImageReady to perform, in order, the defined list of commands. You sequence the commands to create an action, and then play back an action to affect a single image file or a folder with many image files. For example, you can use an action to resize an image to 100×75 pixels, boost contrast, and save it as an optimized JPEG. Instead of having to select these commands individually, you can combine them into a single action that performs all of the commands when you play that action.

When you create a thumbnail gallery, you resize and optimize many images, usually so that they are all the same size and in the same format. Because actions let you process images in this way, actions are especially helpful when creating thumbnail galleries.

In Photoshop and ImageReady, actions are stored in the Actions palette. Figure 8-1 shows the first four actions in the action set named Default Actions.atn. The action named Sepia Toning (layer) is expanded, making visible the individual steps of the action. Some steps are actions themselves, and contain subsets of additional actions and steps. The Sepia Toning action is a parent action to the steps and actions contained within it. When you play the Sepia Toning action, Photoshop first makes a snapshot of the affected image, and then makes a new layer. The action merges the visible layers, desaturates the image, and makes a new layer with new settings.

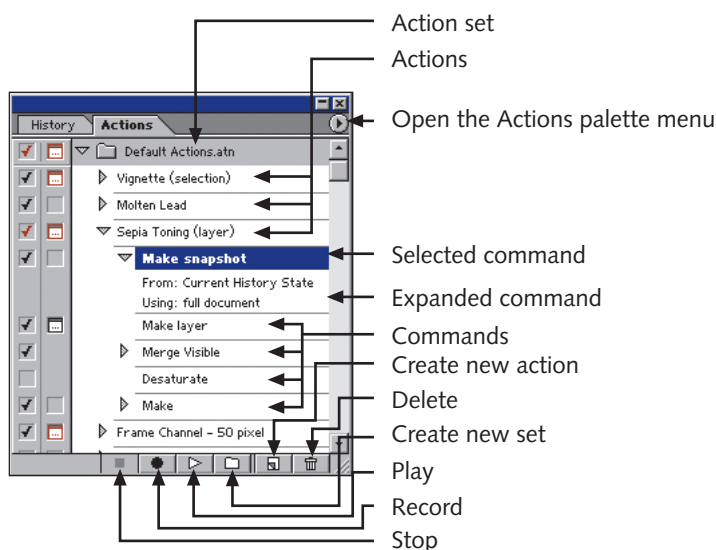


Figure 8-1 The Actions palette

While the History palette records recent commands applied to an image, the Actions palette saves groups of commands as actions. Use the Actions palette to create, edit, play, delete, and store actions.

To open the Actions palette, choose Show Actions from the Window menu. You can display actions in the Actions palette using **List view** or **Button view**. Select Button Mode from the Actions palette menu to view the available actions as color-coded buttons as shown in Figure 8-2. Deselect this option to display them as a list. The List view displays more information about each action than Button view does, while the Button view lets you see the actions with color-coding. You can set the color for an action only when in List view. Figure 8-1 shows available actions in List view. When you create an action, you select the commands from the Actions palette using either List view or Button view. See the Playing Actions section for other considerations when choosing between List and Button view.

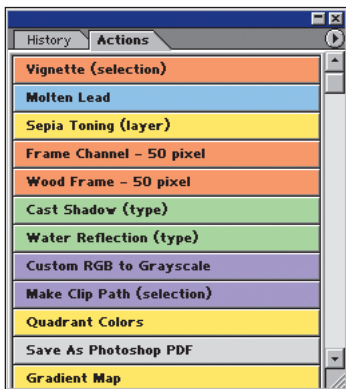


Figure 8-2 Button view

Just as you sequence commands to create an action, you can arrange actions into **sets**. In other words, you use sets to organize your actions.

Photoshop and ImageReady come with several preset actions which perform common tasks, such as resizing images to a fixed output size or adding various filter effects. The actions are specific to the software in which they were created. You cannot use Photoshop actions in ImageReady, and vice versa.

You can use the preset actions, record your own actions, edit actions, and manipulate the playback of actions. The following sections explain how to play, record, and edit actions.

Playing Actions

Playing an action applies the series of commands in the action to an opened image file. You can play an entire action (all the commands), one command in an action, or only a subset of the commands. When actions are listed in Button mode, you can only play entire actions.

To play an entire action, select the action name in the Actions palette and click the Play button or choose Play from the Actions palette menu. You also can use the keyboard shortcut assigned to the action.

To play part of an action, first expand the action in the Actions palette by clicking the triangle to the left of the action name. This displays the full sequence of edits in the action. Select from the sequence the first command you want to apply to the image. When you play the action, it starts with this command. If you select one command, playback runs from that command to the end of the sequence. If you select consecutive commands, playback runs through only that subset of commands.

To play a single command from an action, select the command, hold down the Macintosh Command key or the Ctrl key in Windows, and double-click the command or click the Play button.

Save your images before applying an action to them. The Undo command reverses only the last command in an action, not the whole action. To restore the image to its state before you played the action, use the Revert command.

To play an action:

1. Create a new image file of any size in Photoshop and save it as **action_test.tif** in your Chapter 8 folder.
2. Open the Actions palette and click the **triangle** next to Default Actions to expand the set of actions that comes installed with Photoshop.
3. Make sure the actions are displayed as a list rather than as buttons. If they are displayed as buttons, click the **right triangle** to open the Actions palette menu and click **Button Mode** to deselect it.
4. Scroll down the list of actions and find the one named Molten Lead. Click the **triangle** next to Molten Lead to expand the list of commands in the action. Then click the first **indented triangle** to expand the first substep for the Make Snapshot command. Figure 8-3 shows the expanded list of commands for the Molten Lead action.
5. See if the check box to the left of the Molten Lead action name contains a dialog box icon. If it does, click the **check box** to deselect the icon.
6. Click **Molten Lead** to select it, and then click the **Play** button on the Actions palette toolbox. (Refer back to Figure 8-1.)
7. You see each command highlighted in turn as the action plays through the sequence, and you see the History palette filling with states. You also see the changes taking effect in the image.

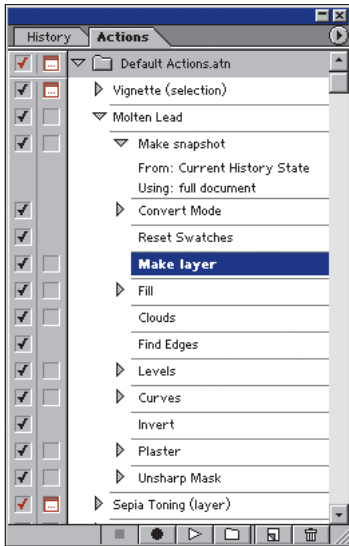


Figure 8-3 The expanded list of commands for the Molten Lead action

8. When completed, the blank image you created shows the Molten Lead effect, as illustrated in Figure 8-4.

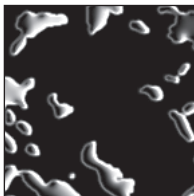


Figure 8-4 The Molten Lead effect

Modifying Playback

Sometimes you want to use an action on an image, but realize that not all of the commands are appropriate. Rather than create an entirely new action, you can modify an existing action by adding, excluding, deleting, or editing steps. You can modify the preset actions included in Photoshop or ImageReady, or modify an action you have created yourself. To exclude specific commands from an action, open the Actions palette in List mode. Click the check mark to the left of the command you want to exclude. This removes the check mark, indicating this command will not be performed—it is excluded or disabled. The check mark of the action turns red, as shown in Figure 8-5, indicating that one step in the action has been disabled. To include the command in the action, click the command. The action performs only checked commands and skips unchecked ones.

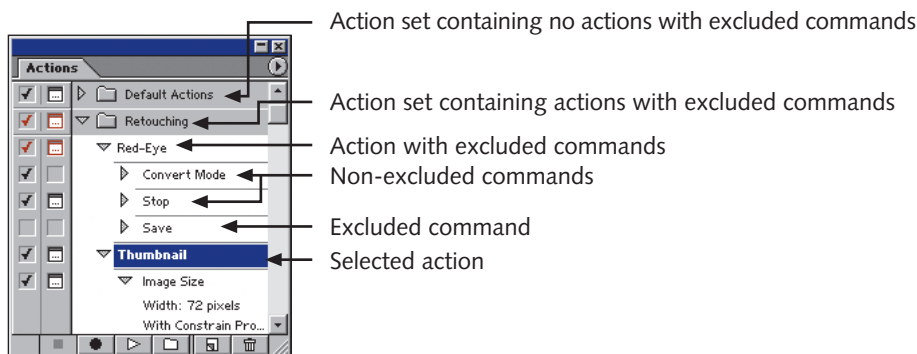


Figure 8-5 The Actions palette with some commands excluded

If you play the action named Red-Eye as shown in Figure 8-5, the first two commands would be performed, but the last step, saving the file, would be skipped.

If you want to permanently exclude a command, you can delete it in three ways. First select the unwanted command, and then use one of the methods listed below:

- Click the trash can icon in the Actions palette and click OK.
- Drag the action or command to the trash can icon.
- Choose Delete from the Actions palette menu.

Using Modal Controls

Most features in an action play without needing additional information from you. Other features require you to enter values or respond to messages during playback. For example, converting the mode from Indexed color to RGB color is a simple process needing no input from you. Changing the image size, however, requires that you enter values into the Image Size dialog box.

To pause the playback of an action so you can enter values in a dialog box, use a **modal control**. You can set modal controls only for actions that launch dialog boxes. If you do not set a modal control, dialog boxes do not appear when you play the action, and the commands use the values that were last used by the command. In the Actions palette, a modal control is indicated by a dialog box icon to the left of a command, action, or set. A red dialog box icon means one or more commands with a modal control are excluded, as shown in Figure 8-6.

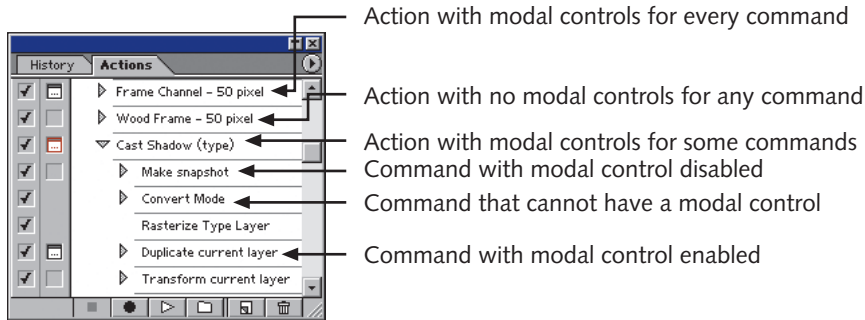


Figure 8-6 The Actions palette with some modal controls disabled

In Photoshop you must be in List mode to set a modal control. You can add modal controls by clicking the dialog box icon to the left of the command in the Actions palette. When you play the action, it pauses at the command, and opens the appropriate dialog box so you can add values.

The Molten Lead action you worked with earlier in this section used modal controls to retrieve information from you while the action played. Complete the steps again, but this time deselect the dialog box icon to the left of the name of the action. When you play the action now, it will use default settings for all commands, and will run without needing input from you.

To enable modal controls when playing an action:

1. Create a new image file of any size in Photoshop and save it as **action_test2.tif** in your Chapter 8 folder.
2. Make sure the check box to the left of the Molten Lead action name contains a dialog box icon. If it does not, click the **check box** to enable modal controls.
3. Click **Molten Lead** to select it, and then click the **Play** button on the Actions palette toolbox.
4. Several dialog boxes appear asking for information from you. For each dialog box, click **OK** to accept the default values, or change the values in some way to alter the effects of the commands. When the action stops for the Plaster command, enter **3** for the Image Balance value.
5. You see each command highlighted in turn as the action plays through the sequence, and you see the History palette filling with states. You also see the changes taking effect in the image.
6. When completed, the blank image you created will show a variation of the Molten Lead effect, as illustrated in Figure 8-7.

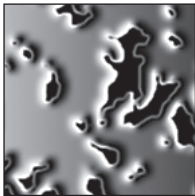


Figure 8-7 A modified Molten Lead effect

Creating Actions

You have examined the Molten Lead action, a preset action Photoshop provides by default, and learned how to modify an action by disabling commands and setting modal controls. If none of the existing actions performs the task you want to automate, you can create an action. To do so, you perform the task while Photoshop or ImageReady records the commands you use. You can record most, but not all, Photoshop and ImageReady commands when creating actions. The following sections explain how to record actions in both Photoshop and ImageReady and how to set recording options in ImageReady only.

Recording Actions

Most, but not all, of the commands in Photoshop and ImageReady can be recorded and incorporated into actions. Actions can include **stops** and **modal controls**, which delay the playback of the action to allow you to perform tasks or enter values that are specific to the image being edited. You also can assign keyboard shortcuts for actions.

The record feature in Photoshop and ImageReady records nearly every command, including opening, closing, and saving images. The commands that cannot be recorded are those that involve using tools, such as the Paintbrush tool, as opposed to a dialog box, such as the Levels dialog box. Keep that in mind as you create actions. If you open the image after you begin recording, the action will include a command to open that image. Because you do not want the action to open the same image each time, have an image open before recording. Photoshop or ImageReady then performs the task on any open image. Before you begin recording, you might want to first perform the operations on an image to test the steps and make sure you are performing the task correctly.

Before creating an action, you should organize your actions into sets. This makes it easier to find a particular action later. For example, imagine you want to automate the creation of thumbnail images. Create a new set for all your image-resizing actions. Then create a new action containing specific commands to resize images into thumbnails. First create an action set called **Resize**, and then create an action called **Reduce to Thumbnail** within the **Resize** set.

To create an action set:

1. Click **New Set** from the Actions palette menu.
2. In the New Set dialog box, enter **Resize** as the name and click **OK**.



Names such as Set 1 will only confuse you later. Use descriptive names such as photo retouching or reduce and optimize. This will help you identify your sets and actions later.

3. Choose **New Action** from the Actions palette menu or click the **New Action** button on the Actions palette toolbox. The New Action dialog box opens, as shown in Figure 8-8.

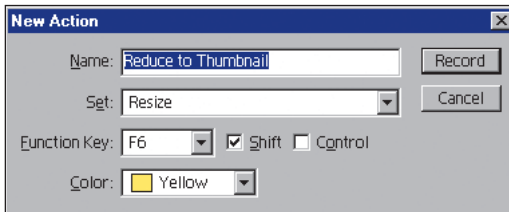


Figure 8-8 The New Action dialog box

4. Type **Reduce to Thumbnail** for the action name and choose **Resize** as the set.

If you think the action you are recording is one that you will use frequently, assign a keyboard shortcut. You can choose any combination of a function key (F1, F2, etc.), the Ctrl key (Windows) or Command key (Mac OS), and the Shift key (for example, Ctrl+Shift+F4). In Photoshop you also can select a color for the action, to help you organize it in the palette.

5. In the New Action dialog box, choose **F6** as the function key and select the **Shift** check box. This sets the keyboard shortcut as Shift+F6.
6. Select **Yellow** for the action color and click **Record**. The record button turns red, indicating that the software is recording the commands.



Unlike audio or video recording, recording commands is not time-sensitive. You can perform the steps as slowly as necessary to be accurate.

7. Open the Image Size dialog box and enter **72** for both the Height and Width. Click **OK**.
8. Stop the recording by either clicking the **Stop** button on the Actions palette toolbox, selecting **Stop Recording** from the palette menu, or pressing the **Escape** key. You can stop recording and start again by selecting the Start Recording command from the Actions palette menu.

Tips for Recording and Editing Actions

The results of some commands are affected by existing software and file settings, such as the foreground color or the mode of the image. If the software settings when you created the action do not match those when you play the action, you might see unexpected results.

When you record settings in dialog boxes, only those settings that you change are recorded. Even if a dialog box already contains the right values when you open it, you must type them again to make sure they are recorded.

Modal operations and tools use the units that are set in the ruler when the action is run. Make sure you always use the same units, or record the units you switch in the Preferences dialog box. In Photoshop you might want the ruler set to a percentage, rather than an absolute unit such as pixels or inches. This causes the actions to affect the same relative area, regardless of the actual size of the input file.

When you are finished adding commands, select **Save a Copy** from the File menu. Select the format and optimization options. Save to an existing folder. Do not create a new folder now, otherwise a new folder will be created for every file processed with this action. If you want the processed images to be saved to a new folder, create the folder before recording.

Click File on the menu bar, click Close to close the original image, and then click Don't Save. This ensures that the action will create new images while leaving the originals as backups. Make sure you do not accidentally create an action that overwrites existing files.

If you do not like the action you have created, you can rerecord the entire action. To do so, select the action name in the Actions palette, and choose **Record Again** from the Actions palette menu.

You can produce complex actions by recording an action in which you play other actions. This results in nested actions, where one action accesses another. This can be useful if you want to create modular actions. For example, you could have one action that saves an image as a 7-bit GIF image. This action can then be called by many other actions which each resize an image in a different way.

Recording Options in ImageReady

While Photoshop is a good all-purpose image-editing tool, ImageReady is designed specifically for creating Web images. In some cases you have more control over images in ImageReady than you have in Photoshop.

Resizing images is one of the most common procedures for actions, but a resize command in an action might not always work the way you expect. Your input images might not always be of the same original size or ratio, and this can produce unwanted results. For example, imagine you have several images that are all at least 400 pixels in height. You might record an action that reduces these images to 100 pixels in height. However, if you then apply that action to an image that is 50 pixels high and 300 pixels wide, the

action doubles the height and width. This produces an image that has been stretched to 100 pixels by 600 pixels and is too large for most Web graphics.

In ImageReady, you have more control over how the images are resized. For example, you can constrain the sizing so that the images do not change beyond a set value. When recording an image size change in ImageReady, select Action Options from the bottom of the Image Size dialog box, as shown in Figure 8-9.

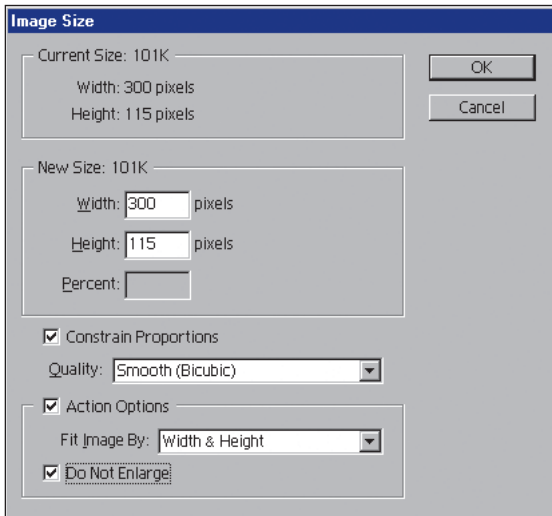


Figure 8-9 The Image Size Action Options in ImageReady

Change the options in this dialog box according to the guidelines below:

- Select Width to constrain proportions using the set width value.
- Select Height to constrain proportions using the set height value.
- Select Width & Height to constrain proportions using either the width value or the height value, depending on the dimensions of the image.
- Select Percent to constrain proportions using the percentage value.
- Select Do Not Enlarge to prevent images that are smaller than the set dimensions from being enlarged.

If you want all images to be saved with the exact same dimensions, you can then use the Canvas Size tool to pad the remaining space.

Editing Actions

Once an action is created, you can edit the action and the steps inside it. You can change or delete values, add new commands, rearrange existing ones, and add pauses to the action.

Sometimes you want two actions to perform similar functions. Rather than creating the second action from scratch, you can duplicate an existing action and use it as the basis for the new action. Duplicate the action by dragging it to a new location in the Actions palette while holding down the Option key for the Macintosh or the Alt key in Windows. You also can duplicate an action by selecting it in the palette and choosing Duplicate from the Actions palette menu, or dragging it to the New Action button at the bottom of the palette. In Photoshop you can duplicate entire sets as well as actions and commands.

The following sections explain how to change commands, insert new commands and stops, and troubleshoot an action.

Changing Commands

To edit a command in an action, double-click the command, enter the new value and click OK. If the command is a modal tool, change the effect by double-clicking the command, use the tool differently, and press the Return key (or Enter in Windows).

Inserting New Commands

When creating actions in ImageReady, you can drag commands from the History palette to an action in the Actions palette. Some commands in the History palette appear in italics, as in Figure 8-10. These commands are **nonactionable**, meaning they cannot be included in saved actions. These commands cannot be dragged into the Actions palette.

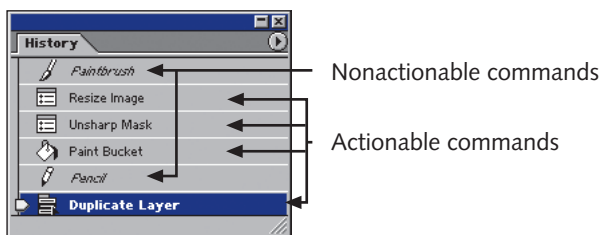


Figure 8-10 Nonactionable commands

Some commands cannot be recorded. These are called modal commands and include commands involving the **modal tools** such as painting tools, tool options, view commands, and window commands. However, you can insert some modal commands using the Insert Menu Item command. You can then select a command from a Photoshop menu and include it in an action. This does not record dialog box values, so is useful only for recording menu items that do not have variable settings. If the command does use a dialog box, the dialog box appears during playback, and the action pauses until you click OK or Cancel. When you use the Insert Menu Item command to insert a command that launches a dialog box, you cannot disable the modal control in the Actions palette.

You also can record new commands. Select a command to act as an insertion point in the action list and select Start Recording from the Actions palette menu, or click the

Record button. Select an action name to append the newly recorded command to the end of the command list. The new command appears after the insertion point. You can rearrange commands in an action and actions in a set by dragging the command or action to a new position.

Inserting Stops

When playing actions, you can include a **stop** to carry out a task that Photoshop can't record or to communicate with the user. You use a stop to perform a nonmodal task such as using a paint tool, or to add a message explaining the action. You also need to include a Continue button so you can restart the action after it reaches the stop command. The Record Stop dialog box is shown in Figure 8-11.

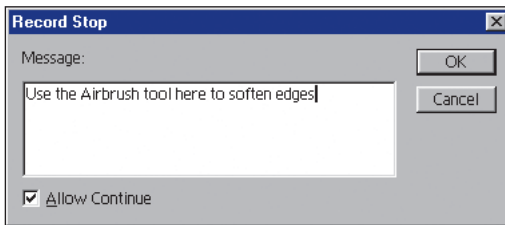


Figure 8-11 The Record Stop dialog box

You are unlikely to use nonmodal features such as painting when processing images in bulk, and you should avoid stopping to read instructions for every image. It is more likely that you will prepare an action to use for photo-retouching. You can preset the resizing and optimizing tasks in the action, but perform the red-eye reduction manually.

Troubleshooting

When creating actions, you might find they do not always work as you intended. You can troubleshoot the action to find the command that is producing unwanted results. Slow the playback of the action to make it easier to see the results of each action. You also can control whether to have audio annotations play in entirety before continuing with the other commands. Choose Playback Options from the Actions palette menu, and then select one of the following options:

- *Accelerated*: Play the action at normal speed
- *Step by Step*: Redraw the image after each command before continuing to the next command in the action
- *Pause for*: Enter an amount of time to delay each command
- *Pause for Audio Annotation*: Play the entire audio instruction before continuing. If this option is not selected, the commands will continue regardless of whether the audio has finished playing

PERFORMING BATCH PROCESSING TASKS

You can apply an action to an opened image by playing the action. To apply an action to multiple images, use the Batch command. Batch processing lets you perform many actions on many images without your intervention. When batch processing images, you should disable all stops and modal controls in the action. Otherwise, you will be prompted for every image; this defeats the purpose of batch processing. If you are saving the processed files to a new location, you can create a new folder for the processed files before starting the batch.

Batch processes can take a long time, perhaps hours, depending on the number of image files to process, the complexity of the action, and the processing speed of your computer. All commands are registered in the History palette, even commands that are executed as part of an action. You can speed the performance of batch processes by reducing the number of history states registered in the History palette. Every edit you perform on an image is recorded as a state in the History palette to allow you to undo changes. For better batch performance, open the General options in the Preferences dialog box, as shown in Figure 8-12. Reduce the number of History States. The default is 20; select a smaller number, such as 5.

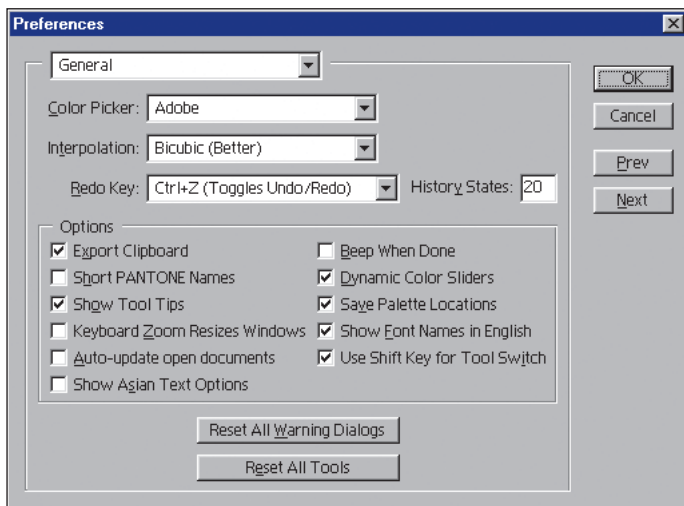


Figure 8-12 The History States option

Additionally, open the History Options in the History palette and deselect the Automatically Create First Snapshot option. The History Options dialog box is shown in Figure 8-13. Both of these methods help to reduce the amount of memory needed to play an action.

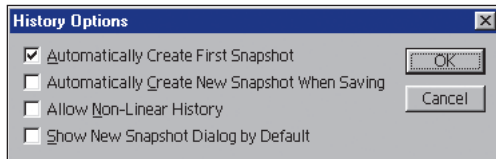


Figure 8-13 The History Options dialog box

Using the Batch Dialog Box

To apply an action to multiple images, click File on the menu bar, point to Automate, and then click Batch. The Batch dialog box opens, as shown in Figure 8-14. Choose Set and Action options from the drop-down lists. If you want to apply multiple actions, create a new action in which you record yourself playing the other actions.

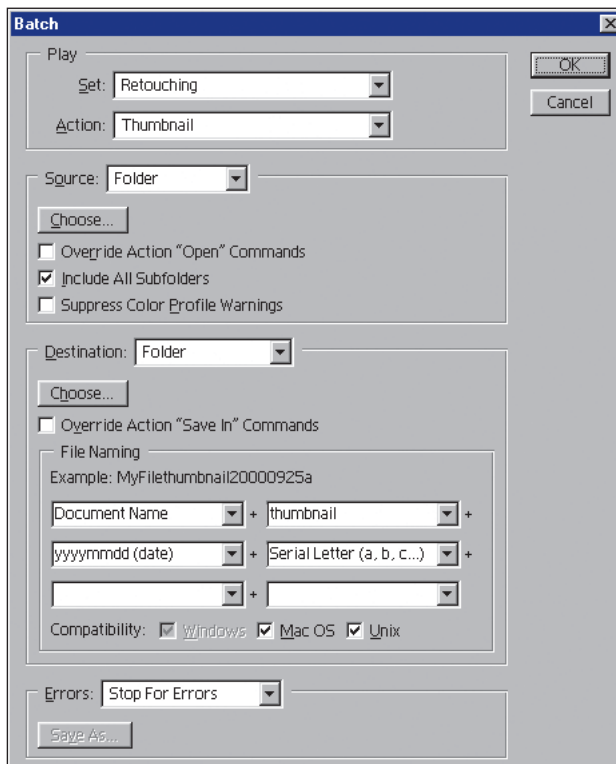


Figure 8-14 The Batch dialog box

Selecting Source Images

The Batch command lets you play an action on a folder of files and on subfolders. Although you could batch process a single image file, it is simpler to open the image and play the action directly.

In the Batch dialog box, select the source folder for the source to play the action on files stored in a folder on your computer. Before processing your images, make sure they are collected into one folder. If you want to batch process multiple folders, create aliases (shortcuts in Windows) for the other folders and place them in one folder. Click Choose in the Batch dialog box to locate and select the folder. When the source is a folder of images, you have three additional options:

- Select Override Action “Open” Commands if you want open commands in the action to refer to the processed files, instead of the files specified in the action. You can generally leave this unselected.
- Select Include All Subfolders to process files in subfolders. You should select this if your folder of images contains other folders with images you want to process.
- Select Suppress Color Profile Warnings to turn off the display of color policy messages. You can generally leave this unselected.

Rather than selecting a folder of images as the source, you can import files directly from a peripheral device. Select Import for the source to import and play the action on images from a digital camera or scanner. If you have a digital camera or a scanner with a document feeder, you might be able to import and process multiple images with a single action. The scanner or camera needs an acquire plug-in module that supports actions. Some acquire plug-ins do not support importing multiple documents, and do not work during batch processing.

Select Opened Files for the source to play the action on all open image files. This will apply the action to any image file currently opened within Photoshop or ImageReady.

Selecting a Destination

Once you have chosen the source of the images to be processed, you need to select where to save the newly processed files. You can leave all the files open, close and save the changes to the original files, or save modified versions of the files to a new location, leaving the originals unchanged. Choose the third option so that you don't lose images if the batch process is interrupted.

Also in the Batch dialog box, select None for the destination to leave the files open without saving changes. Choose this option if you want to continue working with all of the images after processing them. You should also select this option if the action contains commands or options specifying how to save the images.

Select Save and Close to save the files in their current location, overwriting the original files. You should select this option only if you made backup copies of your original files. It is very easy to accidentally overwrite all of your original files with improperly processed ones. You should get in the habit of always making backup copies of your images. After you process the images you can process again if there was a problem, or delete the originals once you are sure the processing was successful.

Toward the bottom of the Batch dialog box, select the folder for the destination to save the processed files to an existing folder. Click the Choose button and locate a folder where you want to save the processed images. Choose a folder other than the one where your originals are. Select Override Action “Save In” Commands if you want save as commands in the action to refer to the batch processed files, rather than the filenames and locations specified in the action. You can usually leave this box unselected.

Selecting a Naming Convention

If you chose Folder as the destination, you can specify a file naming convention and select file compatibility options for the processed files. Click a File Naming list arrow to select elements from the lists, or enter text into the fields to be combined into the default names for all files. Filenames can include up to six elements, each of which can be one of five options:

- *New word*: The new word can be any word or phrase you type, but should include no spaces or punctuation marks.
- *Original image name*: The original image name can be formatted as uppercase, lowercase, or title case (the first letter of each word is capitalized).
- *Serial number*: The serial numbers can be one, two, or three digits, and increment for each image processed. For example, selecting Document Name and 2 Digit Serial Number produces files with names such as MyImage01 or MyImage02.
- *Serial letter*: The serial letters can be uppercase or lowercase. You should always include a serial number or letter in the filenames so that they are all unique. If you do not do this, every file will save as the same name, replacing each other.
- *Current date*: The date can be formatted in many ways. The most common format for the Web is yyyyymmdd, which indicates a four-digit year, followed by a two-digit month and a two-digit day of the month. For example, July 4, 1776, would be represented in yyyyymmdd format as 17760704.
- *File extension*: The file extension can be uppercase or lowercase, and should always appear as the last element in the filename. You should always include the extension to any image you create. The extension is what tells the browser whether the image is a GIF, JPEG, or other format.

Saving files using the Batch command options always saves the files in the same format as the original files. If you want to create a batch process that saves files in a new format, record the Save As command followed by the Close command as part of your original action.

You also can select a Compatibility option for filenames. Macintosh and Windows operating systems both allow spaces in filenames and are not case sensitive (that is, they do not distinguish between uppercase and lowercase names). For example, a filename such as Red button.gif is allowed, and is not different from red BUTTON.Gif. UNIX systems are more strict about filenames and do not allow any spaces. They are also case sensitive. For example, the filename Red button.gif is not allowed, and filenames such as Blue.gif and blue.gif are treated as different files. Select the UNIX compatibility option to replace spaces with hyphens. You do not always know what type of operating system is running on the computer that serves the Web pages containing your graphics. Most Web servers run UNIX, however, so you should always make your filenames UNIX-compatible. Selecting Mac OS for the compatibility cuts off any characters past 32. Some versions of the Macintosh operating system do not allow filenames to have more than 32 characters.

Although filenames can have both uppercase and lowercase letters, most Web sites use the convention of always using lowercase filenames. When typing the HTML code that calls the images, you save a little time if you avoid pressing the Shift key to create uppercase letters. Also, because UNIX servers are strict about case, it is easier to be consistent and use all lowercase for filenames. In general, give your images names that are compatible for all operating systems.

Solving Handling Errors

Occasionally, batch processing a set of image files causes errors. You can either have the process stop and alert you of each problem, or continue processing the remaining files while saving the error messages to a log file. In the Batch dialog box, click the Errors list arrow and select what you want to do when the batch process finds an error. Selecting Stop for Errors suspends the batch process until you confirm the error message. Selecting Log Errors to File records each error message to a log file without stopping the process. In general, it's a good idea to stop for errors. Otherwise, you might have to re-create the image files after you examine the log file. However, if you are using an action that has worked successfully before and are confident that it should work again, you can log the errors and review the problems later. If you log errors, do not save the log file to the source image directory.

SAVING AND SHARING ACTIONS

While batch processing is convenient for some projects, you cannot use it during ongoing projects while you are still creating and acquiring images. For example, an online magazine might include a new photo on its home page every day. You cannot process in bulk because you receive a new image every day. In these circumstances you can use a

droplet, a small application represented by an icon. Save an action as a droplet so you can process image files when necessary. To process an image file, drag it over the droplet icon.

The following sections explain how to save and load actions in Photoshop and ImageReady and how to use and create droplets.

Saving Actions

Each action you create is saved as part of an action set in a file with an .atn extension in the Photoshop Preferences folder. If you delete this file, any actions you created are lost. You can save your actions to a separate actions file so that you can recover them if necessary.

Saving Actions in Photoshop

In Photoshop all actions must reside in a set, and you can save only the entire contents of a set, not individual actions. This means you must selectively delete and rearrange your actions so that you end up with a set of appropriate actions, or only one action. Select the set, and select Save Actions from the Actions palette menu. You can then share the action with colleagues, or copy it to multiple computers. You also can save actions to a text file by holding down the Command and Option keys (Ctrl and Alt keys in Windows). The text file can be useful for reviewing the process of editing an image, but it cannot be reloaded into Photoshop.

Loading Actions

To load a set of actions, choose Load Actions from the Actions palette menu, and then locate and select the action set file. To load a preset action set, select an action set from the bottom section of the Actions palette menu, or select Load Actions from the Actions palette menu to open the Load dialog box, shown in Figure 8-15. Use the Load dialog box to locate an action set. To restore actions to the default set, choose Reset Actions from the Actions palette menu. Click OK to replace the current actions in the Actions palette with the default set, or click Append to add the set of default actions to the current actions in the Actions palette.

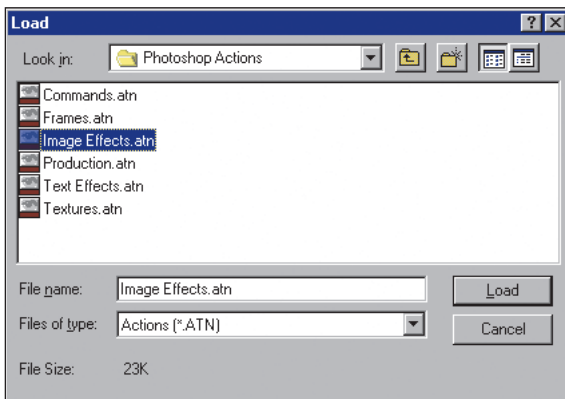


Figure 8-15 Loading a preset action set

Using Actions in ImageReady

In ImageReady, all actions you create are saved with the extension .isa in a folder named ImageReady Actions in the Photoshop Preferences folder. Any action used with ImageReady must be stored in this folder. ImageReady does not allow you to load actions through the software; to add actions, you must drag them directly into the Actions folder. You can archive action files by dragging them out of the Actions folder. You can also delete actions by deleting them from this folder. Whenever you add or remove files from the Actions palette, you have to instruct ImageReady to scan the Actions folder. Do this by selecting Rescan Actions Folder in the Actions palette menu.

Using Droplets

Actions are useful when you need to process many files in a particular way. For some projects, such as creating a thumbnail gallery, you must process all of the images at once. For these projects you create an action, apply it to your images, and either save it for later or delete it. However, if you need to add a few more images to the gallery months later, you need a convenient way of processing only a few images. You could open Photoshop, open the image, and then apply the action, or you could set up a batch process. However, it is easier to use a stand-alone application called a droplet. A **droplet** is a small application that applies an action to one or more images that you drag onto the droplet icon. You can save a droplet on your desktop or share it with colleagues. A droplet appears on your desktop as an icon, similar to the one shown in Figure 8-16.

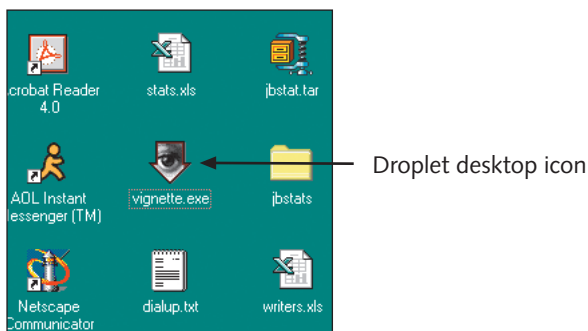


Figure 8-16 A droplet on the desktop

Use a droplet when you need to process many images, but cannot process them at the same time. For example, imagine you are responsible for the graphics on the home page of an online news magazine. Every day you need a new image for the home page, but because they are news photographs, you never receive them until that morning. The final graphics need to be a specific size to fit the layout of the page, so you need a simple utility that will take any image and convert it to the size you need without having to actually manipulate actions every time. Droplets are the answer.

Droplets are stand-alone actions. First you create the action, and then you create the droplet. To use a droplet, drag an image file or a folder of image files onto the droplet icon. The droplet launches Photoshop or ImageReady, if it is not already running, and plays the action over the file or files. In ImageReady you can use control buttons to pause, resume, or stop the processing.

Creating a Droplet From an Action

Creating a droplet is almost identical to running a batch process. Click File on the menu bar, point to Automate, and then click Create Droplet. The Create Droplet dialog box opens, as shown in Figure 8-17.

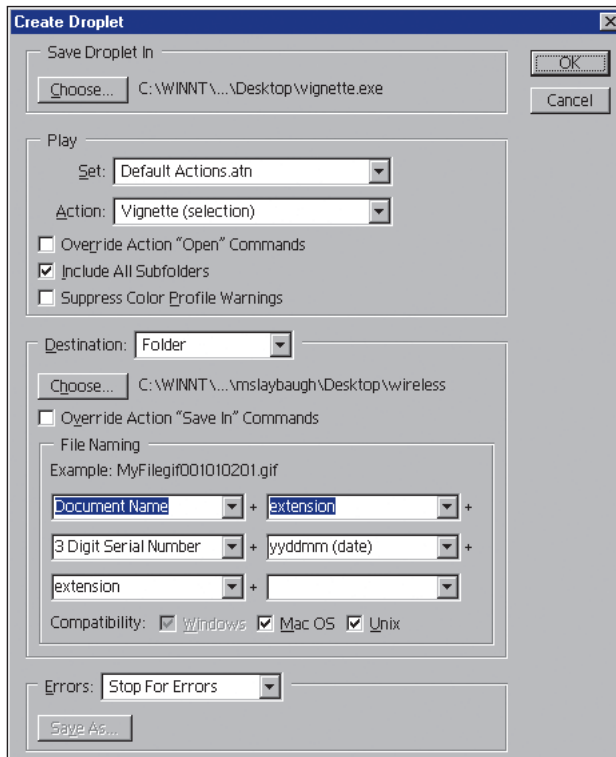


Figure 8-17 The Create Droplet dialog box

Click Choose in the Save Droplet In section, and select a name and location to save the droplet. You can use your droplets on both Macintosh and Windows systems. These two systems have different naming conventions, however. The Mac OS has no requirements for naming, but Windows requires that all applications end in the extension .exe to indicate that the application is an executable file. When creating droplets on a Mac, add the .exe extension to your droplet names to make them compatible with both systems. If

you create a droplet in Windows that you also want to use on a Mac, copy the droplet to a Mac and drag the droplet icon onto the Photoshop icon. The droplet will then be updated to be used on Macs.

The rest of the options for creating the actions in a droplet are the same as when preparing a batch process.

Creating Droplets in ImageReady

ImageReady contains a few features and options not available in Photoshop. By default, ImageReady processes images using the optimization settings that were active when the droplet was created. You should add a Set Optimization command to the droplet to control how the processed images are optimized. To do so, adjust the settings in the Optimize palette, and then drag the droplet icon from the Optimize palette onto the Actions palette. To actually create the droplet in ImageReady, you can save the action as you would in Photoshop, or you can drag the action name from the Actions palette to the desktop.

Editing Droplets in ImageReady

In ImageReady, you can edit the commands in a droplet in the same ways you edit the commands in an action. You also can set batch options for a droplet before or after you create it. For example, you can set the droplet to operate in the background during execution so that you can work in other applications while ImageReady processes images.

To edit a droplet, double-click the droplet. This opens the ImageReady droplet window, which resembles the Actions palette. You can then rearrange, delete, or add commands by dragging states from the History palette into the droplet list.

Using Droplets to Automate Optimization Settings in ImageReady

In ImageReady, you also can create droplets from the Optimize palette. This lets you apply Optimize palette settings to individual images or folders of images. To create a droplet that automates Optimize palette settings, first open an image and select your optimization settings in the Optimize palette. Then drag the droplet icon from the Optimize palette to the desktop, or select Create Droplet from the palette menu. You can add droplets to an existing action by dragging the droplet icon in the Optimize palette to the Actions palette. This incorporates the optimization settings into the action.

Setting Batch Options for Droplets in ImageReady

Droplets are almost always used in ImageReady to batch process image files, so you can set batch options directly in the droplet. You can open the options of a droplet by selecting an action that you want to turn into a droplet, and then select Batch Options in the Actions palette menu. You also can open the options of an existing droplet by double-clicking the droplet and then double-clicking Batch Options in the droplet list.

The batch options shown in Figure 8-18 are similar to the options in the standard Batch dialog box.

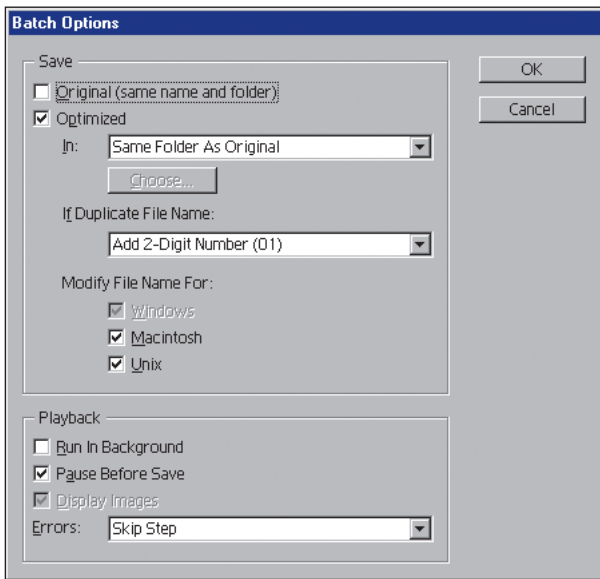


Figure 8-18 Batch Options for Droplets

You can select Original in the Save area of the Batch Options dialog box. This replaces your original images with the processed ones, meaning you can lose your original images if you make an error. Keep this option unchecked unless you already have backups of the images.

Select Optimized as a save option to optimize the processed image files, and then choose where you want to save the images. Generally, you should select Specific Folder and choose a folder that is different from the one where your originals are saved. If you choose to save the processed images in the same directory as the originals, you can set the If Duplicate File Name option. Here you can choose whether you want to overwrite the original or save a new file using the same name appended with a serial number or letter.

Under Modify File Name For, check all the boxes to make the filenames compatible with all other operating systems.

Setting Playback Options

ImageReady also includes options for how it runs when you play the droplet. In the Batch options dialog box, select Run In Background to have ImageReady process all of the images without displaying any information about them. This makes the process run more quickly and allows you to work with other programs during the processing.

However, all modal controls are disabled when the process runs in the background and you cannot add any user input. Additionally, when ImageReady is running in the background, it is not available for other image-editing tasks.

Select **Pause Before Save** to halt the processing of each image before saving it. Similarly, select **Display Images** to show the images as they are being processed. This allows you to confirm that the droplet is processing the images as you need them to be. This is a useful option when testing a new droplet, but it slows the process and is inconvenient if you want the droplet to run without needing feedback from you.

You also can choose how you want ImageReady to handle errors which occur during the process. Select **Stop** to suspend the process until you have confirmed the error. Select **Skip Step** to not process commands that cause errors. Select **Skip File** to not process images that result in errors. For new droplets, select **Stop** so that you can quit the process and adjust the commands in the droplet. When you are confident that the droplet works properly, select **Skip File**. If image files are skipped during the process because of errors, you can edit them individually later.

CREATING THUMBNAIL GALLERIES

Photoshop includes one other command that automates the process of creating a thumbnail gallery. It even generates the HTML pages that contain the thumbnail images and the links to the individual full-size images. This command, called the **Create Web Photo Gallery** command, is not appropriate for all Web galleries, but it can eliminate some repetitive tasks. In some cases, you can use the **Create Web Photo Gallery** command, edit the HTML pages, and re-edit the images. In other cases, you can create the HTML and edit the images yourself.

Creating Gallery Pages Manually

Web graphics usually support textual content in a Web page. Sometimes, however, the Web graphics are the content. Professional photographers showcase their work by placing digital versions of their portfolios on Web pages. The full-size versions of photographs are inconvenient to use in Web pages because their large dimensions prohibit viewing more than one or two at a time. Additionally, their large file sizes mean they load slowly. A solution to these problems is to use a thumbnail gallery, where every image is represented by a smaller version of itself. Because these images have smaller dimensions, many can be placed in a single page. The thumbnail images also have smaller file sizes, so a user does not have to invest much time before deciding which full-size images to load. Other types of Web pages also can show thumbnails of graphics. A news site often has snapshots of scenes that are too large to place with the text. To efficiently lay out the page, use a thumbnail in the text that links to the full-size version. You can use a text link to reference the full-size image, but the small thumbnail informs the reader what to expect from

the larger image. You should use thumbnail images only when the information they convey is worth the additional download time caused by the additional files.

There are two ways to use thumbnail images. The first way is to create a copy of the full-size image and reduce the dimensions and color palette to make it load as quickly as possible. This involves creating two versions of every image and means the user has to download twice as many files. However, if you optimize the thumbnails well, each should be less than 1 KB. This means a gallery page with even 20 or more thumbnail images still loads quickly.

The second way to use thumbnail images is to use only one version of each image. You can display the image as a thumbnail by using reduced HEIGHT and WIDTH attributes in the IMG tag. The advantage to this is that you do not have to process the images. The disadvantage is that the user has to download the full-size version of every image, even though only a thumbnail is shown. If you have 20 images in a gallery page, and each image is 50 KB, the total download is about 1 MB. On a slow modem, this is frustratingly slow. However, once the thumbnails have loaded, clicking one opens the full-size version immediately, as it is already in the browser cache.

In general, you should use the first method of creating two copies of the images to generate thumbnails, especially if the full-size versions are large. The second method involving the IMG tag is useful if you are confident that readers will view all of the full-size versions. Only then can you justify the initial wait as the thumbnails download.

Regardless of which method you choose, consider using the LOWSRC attribute when displaying the thumbnails. While the SRC attribute references the thumbnail image, the LOWSRC attribute references another image first as a placeholder while the thumbnail loads. Typically, the images referenced by the LOWSRC attribute are highly reduced. Often the images are converted to 1-bit, black and white versions that load quickly. The advantage is that users with slow connections can view at least a low-quality version of each image. If you do not use the LOWSRC attribute, the user must wait for each thumbnail to load before knowing what the image looks like.

Just as you have two methods for creating thumbnails, you have two methods for linking to the full-size versions of the image. The easier way is to link to the image itself in the HTML code. Instead of linking to an HTML file in the anchor tag, you can link directly to the image file. This involves less work for you, but means the image appears with no navigation or accompanying text. It is quick and easy, but does not look professional.

The second method is to place each full-size version in its own HTML page. These pages can contain captions, ads, navigation, or any other standard Web page elements. Creating separate pages for every image in a gallery involves more work, but looks much more professional than simply linking to the image.

Using the Create Web Photo Gallery Command

A Web photo gallery is a Web site that features a home page with thumbnail images and gallery pages with full-size images. Each page contains links that allow visitors to navigate the site. For example, when a visitor clicks a thumbnail image on the home page, a gallery page with the associated full-size image loads. Use the Web Photo Gallery command in Photoshop to automatically generate a Web photo gallery from a set of images.

Although using the Web Photo Gallery command can reduce the amount of work necessary to create a thumbnail gallery, it has limitations. For example, the command only outputs JPEG format images. This is appropriate for photographic images but not for graphics such as line drawings, which should be saved as GIF images. Also, the generated HTML files do not contain LOWSRC attributes in the IMG tags. If you want to use reduced-size images this way, you have to process the thumbnails yourself and add the LOWSRC attributes manually.

Photoshop provides a variety of styles for the gallery; you can choose a style when you select the Web Photo Gallery command.

To create a Web photo gallery:

1. Click **File** on the menu bar, point to **Automate**, and click **Web Photo Gallery**. The Web Photo Gallery dialog box opens, as shown in Figure 8-19.

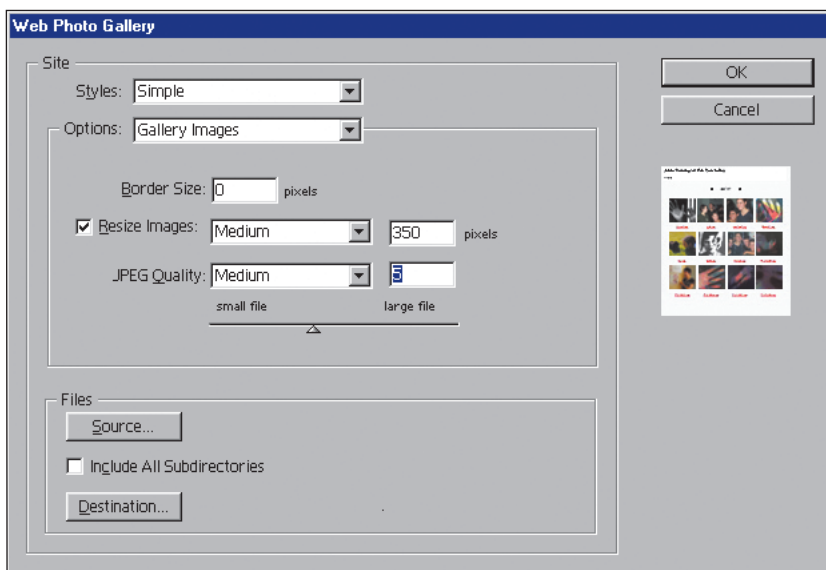


Figure 8-19 The Web Photo Gallery dialog box

2. Click the **Styles** list arrow to select one of four styles for the gallery. A preview of each style appears in the dialog box.

Choose the **Simple** style to create index pages with thumbnails in columns and rows. The number of rows and columns are set in the Gallery Thumbnails options.

Choose the **Table** style to create index pages in the Simple style, but with a border around the thumbnail images.

Choose the **Horizontal Frame** style to create an HTML frameset with a bottom frame containing a row of thumbnail images. Clicking one of the thumbnails causes the full-size version of the image to appear in the top frame.

Choose the **Vertical Frame** style to place the thumbnails in a column in a vertical frame to the left of the full-size frame.

Many Web developers prefer not to use framesets in their Web pages as it increases the number of files they need to manage. Also, because many search engines penalize sites that use frames, doing so may reduce the traffic your site gets from search engines. Still, thumbnail galleries that use frames are easier to navigate and you may choose to use them despite their disadvantages.

3. Click the **Options** list arrow to choose an option for creating the gallery.

Choose **Banner** to adjust the descriptive text in the generated gallery pages. Under this option, you can enter a title for the gallery under Site Name, an author under Photographer, and a date. You also can set the font and size of the text.

Choose **Gallery Images** to adjust options for the full-size images in the gallery.

Choose **Resize Images** if you want to resize the original images. You can then choose an image size for all images and an optimization setting.

Choose **Gallery Thumbnails** to adjust options for the main gallery page. Select Use Filename to display the filename of the image under each thumbnail. Select Use File Info Caption to display the caption text from the File Info dialog box under each thumbnail and on each gallery page. Using the File Info dialog box is described later in this section.

Choose **Custom Colors** to set the colors used in the HTML pages of the gallery. Each different element is listed with a swatch showing its color. Click a swatch to open the Color Picker dialog box and select new colors.

4. In the Files area, click the **Source** button to select the folder containing the images for the gallery. Check the **Include All Subdirectories** check box to include images in any subfolders of the selected folder.
5. Click the **Destination** button to select the destination folder that you want to contain the images and HTML pages for the gallery.
6. Click **OK** to start creating a thumbnail gallery of photo images.

Like all automated tasks in Photoshop, creating the gallery can take a few minutes or a few hours depending on the number of source images and the speed of your computer. During the process, three folders are created. One is named images and contains JPEG versions of all your source images. The second folder is named thumbnails and contains JPEG thumbnail versions of all your source images. The third folder is named pages and contains the HTML pages that hold the full-size images in the images folder. The process also generates HTML pages with names such as index.htm and index_2.htm. These pages hold the thumbnail images contained in the thumbnails folder.

For most projects, it is a good idea to edit the HTML files generated by Photoshop to adjust layout and add other elements.

You can add information to images in Photoshop and choose to show this information as captions under each thumbnail and on each gallery page. To do so, use the File Info dialog box as described in the following steps. Then open the Web Photo Gallery dialog box, click the Options list arrow, click Gallery Thumbnails, and select Use File Info Caption.

To add a caption to an image:

1. Open the file to which you want to add a caption.
2. Click **File** on the menu bar, and then click **File Info**. The File Info dialog box opens, as shown in Figure 8-20.

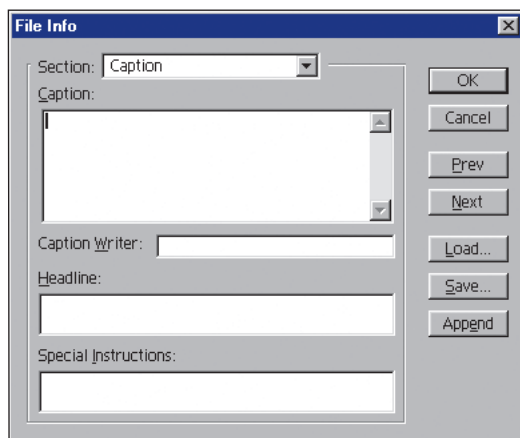


Figure 8-20 The File Info dialog box

Here you can add text, known as **metadata**, to images. Metadata is literally data about data, or in the case of images, image data that is contained within the image. The metadata available in an image's File Info can include information about copyright, authorship, and keywords. Not all image formats support this metadata. JPEG and PNG images can save the information, but

GIF images cannot. In most cases, your images will not contain any text information unless you have added it yourself. You also can add this text information to the HTML pages after you have created them.

3. If necessary, click the **Section** list arrow and then click **Caption**.
4. In the Caption text box, type descriptive text you want to appear as a caption when the image appears full-size or as a thumbnail.
5. Click **OK** to close the dialog box.

USING THE OTHER AUTOMATE COMMANDS

The Automate commands in Photoshop simplify complex procedures by combining them into one command. The Automate commands are found under the File menu in Photoshop. The Batch command and Create Droplet command are the two Automate commands you will probably use most often. Photoshop includes additional commands under the Automate submenu for more specific tasks. Photoshop also supports external automation using OLE (Object Linking and Embedding) Automation in Windows or using AppleScript in Mac OS. This book does not cover these topics in detail, but you can explore them on your own for complex procedures. One example of an externally automated task is a script that shuts down your computer when the process has completed. Another example is a script that processes your images, and then uploads them to your Web server.

8

Creating Contact Sheets

In traditional photography, a contact sheet is a single print that contains miniature versions of all the photos from a roll of film. The Contact Sheet command takes multiple images and creates one large image containing thumbnail versions. This is different from a thumbnail gallery, which is an HTML file containing many separate images. You would not use this command to create thumbnail galleries, but you might use it to share images with colleagues without having to deal with many separate files.

To create a contact sheet:

1. Make sure all of the images you want to use on the contact sheet are closed.
2. Click **File** on the menu bar, point to **Automate**, and then click **Contact Sheet II**. The Contact Sheet II dialog box opens, as shown in Figure 8-21.
3. Click the **Choose** button to select the folder containing the source images. Check the **Include All Subdirectories** box, if necessary, to specify that you want to include subfolders.
4. In the Document area, specify the dimensions, resolution, and color mode for the contact sheet.

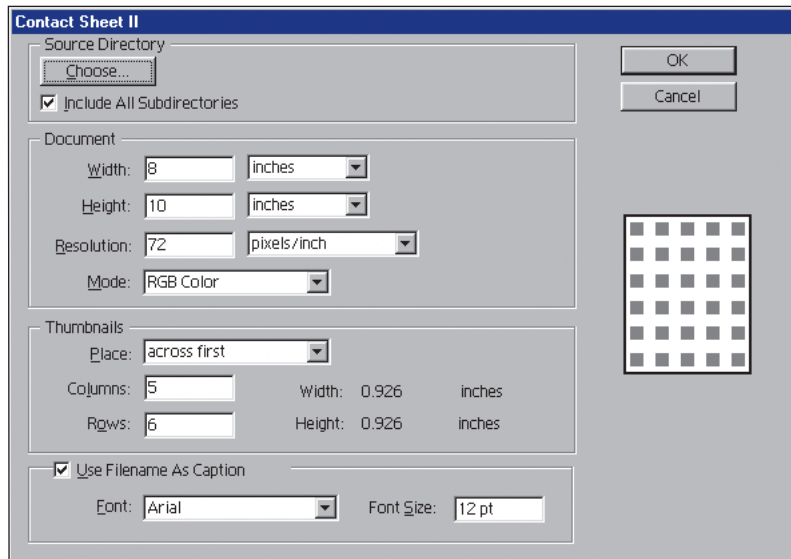


Figure 8-21 The Contact Sheet II dialog box

5. In the Thumbnails area, specify whether to place the thumbnail images in rows or columns, and specify the number of columns or rows per sheet.
6. To apply the name of each image file as a label under the image, check the **Use Filename As Caption** box, if necessary.
7. Click **OK** to close the dialog box.

A picture package is similar to a contact sheet, but includes multiple copies of an image in different sizes. The Picture Package command does not apply to creating Web images. You would use a contact sheet for sharing multiple images without having to create multiple files.

You also can use other preset automation commands to change color mode, fit images, or convert PDF documents to Photoshop image documents. Follow steps similar to those described earlier in the Creating Contact Sheets section to work with the Automate commands.

Using the Conditional Mode Change Command

The Conditional Mode Change command changes the color mode of an image. The dialog box for this command is shown in Figure 8-22.

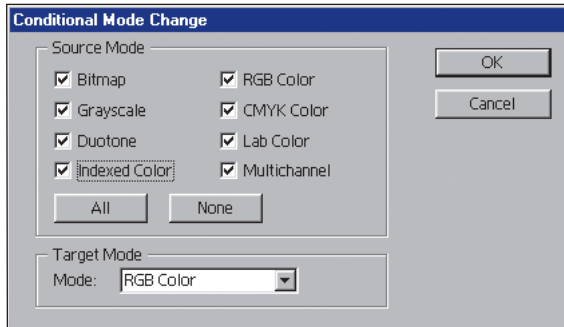


Figure 8-22 The Conditional Mode Change dialog box

Record this command as part of an action to guarantee that all source images have the same color depth. This prevents errors caused by using source images of differing color depths. If your original images have the same color depth, you can ignore this command. In most cases, you should select All for the Source Mode, and RGB Color for the Target Mode. The Conditional Mode Change command should be one of the first commands in an action.

Using the Fit Image Command

The Fit Image command scales source images to the height and width specified in the Fit Image dialog box, shown in Figure 8-23.

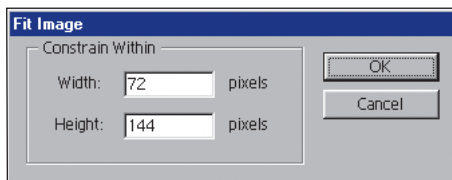


Figure 8-23 The Fit Image dialog box

Changing the Width and Height options in this dialog box does not change the aspect ratio of the images, it only enlarges or reduces the images until both dimensions are less than or equal to the set values. This command resamples the images, interpolating data between pixels if necessary. You can include this command in actions instead of using the Image Size command.

CHAPTER SUMMARY

- You can combine multiple commands into actions by recording the steps of editing an image.

- ❑ ImageReady contains special options for setting the height and width of images that are processed by actions.
- ❑ Actions can include stops, which pause the sequence of commands to let you enter values in a dialog box or use a modal tool such as the Paintbrush tool.
- ❑ The Batch command lets you apply an action to multiple files.
- ❑ You can save actions to use later, or to share with colleagues.
- ❑ You can save actions as droplets, which are stand-alone applications to process images one at a time.
- ❑ Actions and droplets created in Photoshop are not compatible with those created in ImageReady and vice versa.
- ❑ You can create thumbnail galleries by creating reduced versions of images. Use the LOWSRC attribute to improve the user experience.
- ❑ The Web Photo Gallery command automates the creation of thumbnail galleries.
- ❑ Photoshop has commands to generate contact sheets, and automate the processes of changing color depth and resizing images.

REVIEW QUESTIONS

1. What is an action?
 - a. A command inside a droplet
 - b. A sequence of commands in Photoshop or ImageReady
 - c. A stand-alone application that sits on the desktop
 - d. A way to batch process images
2. How can you tell if a command is nonactionable?
 - a. It appears in bold in the Optimization palette.
 - b. It appears in italics in the History palette.
 - c. It appears with a red check mark in the Actions palette.
 - d. It appears with underlining in the droplet list.
3. How can you speed up the process of playing actions?
 - a. Enable modal controls.
 - b. Do not have the actions run in the background.
 - c. Reduce the number of History States in the preferences.
 - d. Set the Playback Options to Step by Step.

4. How do you convert an action created in ImageReady into an action that is usable in Photoshop?
 - a. Actions created in ImageReady cannot be used in Photoshop.
 - b. Add the .exe suffix.
 - c. Export the list of commands as a text file, and then import the file into Photoshop.
 - d. First convert it into a droplet, and then import it into Photoshop.
5. What happens if you use the Undo command after playing an action?
 - a. Nothing happens.
 - b. The action is deleted.
 - c. The entire action is undone.
 - d. The last command in the action is undone.
6. What is a reason to use a modal control?
 - a. To manually set values in the Canvas Size dialog box
 - b. To speed the playback of an action
 - c. To use the Pencil tool
 - d. All of the above
7. How do you include using the Dodge tool in an action?
 - a. Add a Stop to the action with instructions to use the Dodge tool.
 - b. Drag the command from the History palette to the Actions palette.
 - c. Make sure the rulers are set to percentage units.
 - d. Use the Insert Menu Item command.
8. How do you make an image filename compatible with UNIX systems?
 - a. Make sure the filename contains a format suffix.
 - b. Make sure the filename contains no spaces or punctuation.
 - c. Make sure the filename contains no uppercase characters.
 - d. Make sure the filename has fewer than 32 characters.
9. What could be a possible image filename if the Batch File Naming options were set to: 1 Digit Serial Number + Serial Letter (a,b,c...) + mmddyy (date) + extension?
 - a. 3c091001.gif
 - b. 04D20010910.JPEG
 - c. 005f010910.GIF
 - d. 06H100109.jpg

10. What should all batch filenames contain?
 - a. A new word
 - b. The original image name
 - c. A serial number or letter
 - d. The current date
11. How do you make a droplet created in Mac OS work in Windows?
 - a. Add an .exe suffix.
 - b. Drag it over the Photoshop icon in Windows.
 - c. Remove all spaces from the droplet name.
 - d. Remove the .exe extension.
12. When is it better to use a droplet instead of the Batch command?
 - a. When you have to process images in different ways at different times
 - b. When you have to process images in different ways at the same time
 - c. When you have to process images in the same way at different times
 - d. When you have to process images in the same way at the same time
13. How do you set a droplet to skip individual commands that cause errors in ImageReady?
 - a. Select Log to File.
 - b. Select Skip File.
 - c. Select Skip Step.
 - d. Select Stop.
14. What is the LOWSRC attribute used for?
 - a. It is the same as the SRC attribute.
 - b. To provide metadata for an image
 - c. To reference a placeholder while another image is loading
 - d. To reference a thumbnail image
15. What is not a way to display thumbnail images?
 - a. Create a smaller version of the full-size image
 - b. Use reduced values for HEIGHT and WIDTH attributes
 - c. Use the Fit Image command
 - d. Use the Web Photo Gallery command
16. What is not a possible style you can create with the Web Photo Gallery command?
 - a. Thumbnails in a column, next to a frame containing a full-size image
 - b. Thumbnails in a grid, linking directly to the full-size images

- c. Thumbnails in a row, above a frame containing a full-size image
 - d. Thumbnails in a table, linking to separate pages containing the full-size images
17. If you have 20 images, where the full-size version of each is 100 KB, the thumbnail version of each is 10 KB, and the low-source version of each is 1 KB, how many kilobytes have to be downloaded to view the gallery page?
- a. 220 KB
 - b. 2020 KB
 - c. 2200 KB
 - d. 2220 KB
18. If you have 20 images, each is 100 KB, you are not using low-source images, and you are using the full-size version reduced via HTML as the thumbnail versions, how many kilobytes have to be downloaded to view the gallery page?
- a. 2000 KB
 - b. 2020 KB
 - c. 2200 KB
 - d. 4000 KB
19. What does the Conditional Mode Change command do?
- a. Automates the changing of color depth
 - b. Automates the optimizing of images
 - c. Automates the resizing of images
 - d. None of the above
20. What does the Contact Sheet II command do?
- a. Creates one image containing small versions of multiple images
 - b. Creates one image with multiple-sized versions of other images
 - c. Creates thumbnail galleries
 - d. None of the above

HANDS-ON PROJECTS



Project 1: Modifying an Existing Action

You want to use one of the preset actions that come installed with Photoshop, but it does not do exactly what you want it to do. Modify the playback of the action to suit your needs.

Complete these steps:

1. In Photoshop, open the **Actions palette** menu.
2. Expand the action set named **Default Actions**.

3. Select the action named **Quadrant Colors**.
4. Open image file **fish.tif** from the Data Disk.
5. Disable modal controls for the action, but enable modal controls for the Levels command. Play the action.
6. When the action stops to display the Levels dialog box, enter **0.5** for the gamma.
7. Save the resulting image as **fish.jpg** in a new folder named **project_8-1**.
8. Open image file **fish.tif** from the Data Disk again.
9. In the Actions palette, disable all modal controls for the **Quadrant Colors** action.
10. Exclude the **Desaturate** command.
11. Play the action again. You will not be prompted to enter values in dialog boxes.
12. Save the resulting image as **fish2.jpg** in the **project_8-1** folder.



Project 2: Editing an Existing Action

You want to use one of the preset actions that come installed with Photoshop, but it does not do exactly what you want it to do. Edit the commands in the action to suit your needs.

Complete these steps:

1. In Photoshop, open the **Actions palette** menu.
2. Select **Frames.atn**. This restores one of the included sets to the Actions palette.
3. Expand the set, scroll down, and expand the action named **Wild Frame - 50 pixel**.
4. Open image file **fish.tif** from the Data Disk.
5. Open the **Actions palette** menu again and select **Playback Options**.
6. In the dialog box, select **Step by Step** and click **OK**.
7. In the Actions palette, expand the second **Fill** command to expose the details.
8. Double-click the **Fill** command to open the Fill dialog box.
9. Set Use to **50% gray**, set the opacity to **10%**, and click **OK**.
10. Play the action. You can watch the edits being performed. The action calls another action, which contains a stop. Click **Continue**.
11. Save the image as **fish3.jpg** in a new folder named **project_8-2**.
12. Select **Revert** from the **File** menu.
13. Double-click the second **Fill** command to open the Fill dialog box.
14. Set Use to **white**, set the opacity to **50%**, and click **OK**.
15. Play the action again to see the difference.
16. Save this image as **fish4.jpg** in the **project_8-2** folder.



Project 3: Recording an Action in Photoshop

You want to create a simple action in Photoshop to create thumbnail images that are no taller than 36 pixels.

Complete these steps:

1. In Photoshop, click the **New Set** button at the bottom of the Actions palette.
2. In the dialog box, enter **Thumbnails** as the name of the set.
3. Open image file **fish.tif** on the Data Disk. You must have an image open to record an action.
4. Click the **New Action** button, name the action **36 pixels high**, and click **Record**. The Record button will turn red.
5. Click the **File** menu, point to **Automate**, and then click **Fit Image**.
6. In the dialog box, enter **36** for the height and **144** for the width. Click **OK**. You will see the image shrink to 36 pixels in height.
7. Click the **Stop** button.
8. Select the set you created.
9. In the Actions palette menu, select **Save Actions**.
10. Save **Thumbnails.atn** to a new folder named **project_8-3**.

8



Project 4: Recording an Action in ImageReady

You want to create a simple action in ImageReady that lets you create high-contrast thumbnail images.

Complete these steps:

1. In ImageReady, open image file **fish.tif** from the Data Disk.
2. Click the **New Action** button at the bottom of the Actions palette. Name the action **50 pixel.gif** and click **Record**.
3. Click **Image** on the menu bar, and then click **Image Size**.
4. Set the Width to **50** pixels.
5. Select **Action Options** at the bottom of the dialog box.
6. Click the **Fit Image By** list arrow, and then click **Width & Height**. Click **OK**.
7. Click the **Image** menu, and then click **Canvas Size**. Set the Height and Width to **50** pixels.
8. Click the **Stop** button at the bottom of the Actions palette.
9. Open the Actions palette menu and select **Insert Set Optimization Settings to GIF89a**.
10. Select the **Resize Image** command.

11. Click the **Record** button.
12. Click **Image** on the menu bar, point to **Adjust**, and then click **Auto Levels**. The new command appears between the two others. Click the **Stop** button.
13. Double-click the **Resize Image** command in the action. Set the Height to **50** pixels.
14. Open **stein.tif** from the Data Disk.
15. Play the action you created.
16. Save the optimized image as **stein.gif** in a new folder named **project_8-4**.



Project 5: Processing a Batch of Image Files in Photoshop

You have a folder of several images to process with your new action. Use the Batch command to automate the procedure.

Complete these steps:

1. Create a new empty folder named **project_8-5**.
2. In Photoshop, click the **File** menu, point to **Automate**, and then click **Batch**.
3. Click the **Set** list arrow, and select the set named **Thumbnails** you created in Project 3. This set has only one action, which appears in the Action list.
4. Click the **Source** list arrow, and select **Folder**, if necessary. Click the **Choose** button and locate and select the folder named **source_images** on the Data Disk. This folder contains several images.
5. Leave the remaining selection boxes in the Source area unselected.
6. Click the **Destination** list arrow and choose **Folder**. Click the **Choose** button and locate and select the new project folder you created.
7. In the File Naming area, click the **first** list arrow and select **yyyymmdd (date)**.
8. Type **thumbnail** in the second text box in the File Naming area. (This text box is to the right of the one where you selected yyyymmdd (date).)
9. Click the **third** list arrow and select **2 Digit Serial Number**.
10. Click the **fourth** list arrow and select **extension**. (This list is to the lower-right of the one where you selected yyyymmdd (date).)
11. Make sure the **Windows**, **Mac OS**, and **UNIX** boxes are all checked in the Compatibility section. The operating system you are using will be grayed out.
12. Click the **Errors** list arrow, and select **Stop For Errors**, if necessary.
13. Click **OK**. You will see each original image open, shrink, and close again.
14. Open the **project_8-5** folder. You should see several images with names like 20011025thumbnail03.jpg.



Project 6: Processing a Batch of Image Files in ImageReady

You have a folder of several images to process with your new action. Use the Batch command to automate the procedure.

Complete these steps:

1. Create a new empty folder named **project_8-6**.
2. In the Actions palette in ImageReady, select the action named **50 pixel.gif** you created in Project 4.
3. Open the **Actions palette** menu and select **Batch Options**.
4. Deselect the **Original** check box in the Save area of the Batch Options dialog box.
5. Select **Optimized** and select an output folder in which to save the images. Select **project_8-6** as the destination folder.
6. Make sure all three operating systems are checked for compatibility.
7. Under Playback, select **Display Images**.
8. Be sure the action stops on errors. Click **OK**.
9. Open the **Actions palette** menu and select **Create Droplet**.
10. Save the droplet to the **project_8-6** folder with the name **50 pixel gif.exe**.
11. Locate the folder named **source_images** in the Data Disk. Drag the folder onto the new droplet.
12. Open the **project_8-6** folder. You see several new thumbnail images.

8

Project 7: Creating a Thumbnail Page with the Web Photo Gallery Command

You want a thumbnail gallery. Use the Web Photo Gallery command.

Complete these steps:

1. Create a new empty folder on your desktop named **project_8-7**.
2. In Photoshop, click **File** on the menu bar, point to **Automate**, and then click **Web Photo Gallery**.
3. Click the **Styles** list arrow, and select **Simple**. You see a preview of a sample simple style in the right of the dialog box.
4. Set the Options to **Banner**, and type the text that will appear at the top of the gallery page.
5. Set the Options to **Gallery Images** and deselect **Resize Images**.
6. Set the Options to **Gallery Thumbnails**. Click the **Use Filename** check box to select it.
7. Set the Size to **72** pixels.

8. Set the Columns to **3** and the Rows to **4**.
9. For the Source directory, select the folder named **source_images** in the Data Disk.
10. For the Destination directory, select the folder named **project_8-7**.
11. Click **OK**. You see the images being processed.
12. Look in the new folder and preview the HTML pages in a browser. You have a basic Web gallery.



Project 8: Using Additional Automate Commands

You need another action that controls the color depth of the input image files and the size of the output image files. You want this action to be an all-purpose thumbnail generator.

Complete these steps:

1. In Photoshop, open file **stein2.tif** from the Data Disk.
2. In the set named **Thumbnails** in the Actions palette, create a new action named **thumbnail maker**.
3. In the palette menu, select **Insert Menu Item**. A dialog box opens telling you that you have selected nothing.
4. Click the **File** menu, point to **Automate**, and then click **Conditional Mode Change**. Click **OK** in the dialog box, and then click the **Stop** button.
5. Double-click the new command and set the Source Mode to **All** and the Target Mode to **RGB Color**.
6. Select **Insert Menu Item** again.
7. Click the **File** menu, point to **Automate**, and then click **Fit Image**. Click **OK** to close the dialog box.
8. Double-click the new command and set the Width to **96** pixels and the Height to **72** pixels.
9. Click the **Record** button and set the Background color to **white**.
10. Click **Image** on the menu bar then click **Canvas Size**. Set the dimensions to **96** pixels wide and **72** pixels high, with the anchor point in the center.
11. Click the **Image** menu, point to **Mode**, and then click **Indexed Color**.
12. Click the **Palette** list arrow, and select **Local (Selective)**.
13. In the Colors text box, type **64**, and then set Dither to **None**. Click the Stop button to stop recording.
14. Save this action in a new folder named **project_8-8** as a droplet named **thumbnail.exe**.

CASE PROJECT



Your ongoing project is to create an online portfolio.

Find at least three Web sites that contain picture galleries. Note how the images are displayed. Design a gallery of your own, keeping in mind the total size and number of files the user will have to download in order to see the gallery pages.

Generate the gallery pages and images for your portfolio, either by using the Web Photo Gallery command, or by creating thumbnails and HTML pages yourself.

Include links between these pages and the other pages you have created so far for your portfolio.